TI-900

Prepared: November 13, 2000

Short Description:
Regulations for Disposal of Fluorescent Lights for North Carolina and Georgia.

Inquiry:
The PBS Environmental Hotline caller requested information regarding the regulations applicable to the management of fluorescent light bulbs in North Carolina and Georgia. He was particularly interested in knowing the quantities that could be stored and whether the bulbs could be crushed on-site.

Response:
The General Services Administration (GSA) currently has no policy regarding this matter. The caller is referred to the Federal and state-specific requirements.

Federal Requirements

Fluorescent lights are regulated as Resource Conservation and Recovery Act (RCRA) hazardous wastes if they exhibit a hazardous characteristic (e.g. contain mercury or lead at levels, which exceed TCLP thresholds). Studies undertaken have shown that "when the TCLP is performed … fluorescent lamps consistently exceed the TCLP for mercury." (See "Analytical Results of Mercury in Fluorescent Lamps" available from the EPA RCRA docket). The RCRA requirements that apply to the management of fluorescent light bulbs are triggered by the amount of all hazardous waste generated and/or accumulated at a facility in a given period of time. Individual state requirements must be at least as stringent as the federal requirements.

Under RCRA, conditionally exempt small quantity generators (CESQGs) of hazardous wastes (i.e. facilities that generate less than 100 kg [220 lbs.] of hazardous wastes in a month and does not at any time accumulate more than 1000 kg [2,200 lbs.] of hazardous wastes) may legally dispose of hazardous wastes (including fluorescent light bulbs that exceed the TCLP test for mercury) in municipal or other non-hazardous waste systems. CESQGs may also treat wastes at the site of generation without obtaining a RCRA permit. (See 40 CFR 261.5).

Facilities which do not qualify for CESQG status may manage fluorescent light bulbs as “universal wastes” pursuant to the universal waste rule (40 CFR 273) which became effective July 6, 1999. Universal wastes are subject to less stringent management standards than other hazardous wastes.

Small quantity universal waste generators (those who never accumulate more than 5000 kg [11,025 lbs.] of total universal waste, including waste batteries, pesticides, mercury containing thermostats and lamps) are required to:

1) Manage fluorescent light bulbs in a way that prevents releases of wastes to the environment (i.e. contain waste light bulbs in closed containers that are structurally sound; immediately clean up broken bulbs and place them in closed containers);

2) Label fluorescent light bulb containers with one of the following phrases: " Universal Waste – Lamps", or "Waste Lamps", or "Used Lamps;" and

3) Maintain records, which demonstrate that no waste fluorescent light bulbs have been stored on site for more than 1 year from when it became a waste.

Small quantity handlers of universal wastes are prohibited from sending or taking fluorescent light bulbs to a place other than another universal waste handler or a destination facility (e.g. RCRA permitted TSD facility). Small quantity handlers may not treat (e.g. crush) fluorescent light bulbs. Small quantity handlers do not have to prepare RCRA manifests for universal wastes, but transporters must comply with DOT regulations that would be applicable to the waste if it were being transported as a product. (See 40 CFR 273.10)

More stringent standards are applicable to large quantity universal waste handlers (accumulate greater than 5000kg of total universal waste on their property). (See 40 CFR 373.30).

Georgia Requirements

The Georgia hazardous waste program incorporates by reference the federal RCRA program. The federal regulations applicable to the classification of fluorescent light bulbs as "universal wastes" was adopted effective November 16, 2000. Applicable Georgia regulations are codified at Chapter 391-3-11 of the Georgia Administrative Rules.

In summary:

(1) CESQGs in Georgia may crush the bulbs on site and dispose of the bulbs with their normal trash at a municipal landfill.

(2) Small and large quantity handlers of universal wastes: must comply with labeling and packaging requirements; may not crush bulbs; and must send waste bulbs to another universal waste handler for storage or a universal waste destination facility for disposal.

North Carolina Requirements

The North Carolina hazardous waste program incorporates by reference the federal RCRA program. One exception is that, in North Carolina, CESQGs are not allowed to dispose of hazardous wastes in non-hazardous waste landfills. The federal regulations applicable to the classification of fluorescent light bulbs as "universal wastes" is effective January 6, 2000. Applicable North Carolina regulations are codified at Subchapter 13-A of

Chapter A of the North Carolina Administrative Code. A fact sheet is available at http://wastenot.enr.state.nc.us/hwhome/guidance/lcm.htm.

In summary:

(1) CESQGs in North Carolina may crush the bulbs on site but must send waste bulbs to another universal waste handler for storage or a universal waste destination facility for disposal.

(2) Small and large quantity handlers of universal wastes: must comply with labeling and packaging requirements; may not crush bulbs; and must send waste bulbs to another universal waste handler for storage or a universal waste destination facility for disposal.

Fluorescent light ballasts containing PCBs.

GSA currently has no policy on the storage or disposal of these ballasts, and advises following the applicable federal (Toxic Substance Control Act [TSCA], 40 CFR Sections 761.60 and 761.65) and state-specific regulations.

As background information, a ballast may contain PCBs in its “small capacitor,” its “potting material,” or both. “Small capacitor” is defined as a capacitor containing less than 1.36 kg (3 lbs.) of dielectric fluid (40 CFR Section 761).

The following ballasts are not regulated by TSCA and can be disposed of as municipal solid waste:

(1) Ballasts containing capacitors with no PCBs;

(2) Ballasts with <50 ppm PCB potting material; or

(3) Ballasts with small capacitors intact and not leaking, and with <50 ppm potting material. (See 63 Federal Register 35403-35404 (1998), codified at 40 CFR Part 761),see also 40 CFR Sections 761.50 (a)(4), 761.50(b)(2) (i) and (ii), and 761.60(b)(2)(ii)). Further, there are no federal labeling, transportation and manifesting requirements for disposal or storage requirements.

CAUTION! Disposers of fluorescent light ballasts containing a PCB small capacitor may incur CERCLA liability where the practices of a municipal solid waste landfill results in non-leaking and intact capacitors (with potting material containing <50ppm PCBs) to become leaky and not intact, and where the landfill becomes a Superfund site.

The following ballasts are regulated by TSCA accordingly:

(1) Ballasts with intact and non-leaking small capacitors with 50ppm PCBs or greater are regulated as “PCB bulk product waste” requiring disposal in accordance with 40 CFR Sections 761.50(b)(2)(ii) and 761.62(a)-(e), and

storage in accordance with Section 761.65, which generally permits a one-year storage time limit with possible extensions. There are no labeling requirements. Manifesting may or may not be required and depends upon the method of disposal (See 40 CFR Section 761.62 (a), (b), and (c)).

(2) Ballasts that are leaking with potting material having 50ppm PCBs or greater. These ballasts are regulated in the same manner as discussed in paragraph (1) immediately above.

Finally, state and/or local governments may have additional, more stringent, disposal requirements for ballasts containing PCBs. Also, some municipal solid waste landfills may not accept PCBs no matter what their amount or form.